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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,264	11/14/2003	Andre Jeunink	081468-0306683	8058
909	7590	11/21/2005	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			FULLER, RODNEY EVAN	
			ART UNIT	PAPER NUMBER
			2851	
DATE MAILED: 11/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/712,264

**Applicant(s)**

JEUNINK ET AL.

**Examiner**

Rodney E. Fuller

**Art Unit**

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

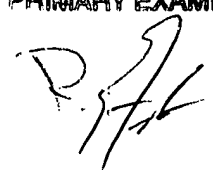
- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**RODNEY FULLER**  
**PRIMARY EXAMINER**



### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Remarks*

In response to the Double Patenting rejection of claims 1-40, the applicant amended claims 1, 3-5, 7-12, 14, 17-21, 26, 28-34, 37 and 38. Further, the applicant states in the response that "Applicant's have amended the claims to more accurately describe the invention and to distinguish over Jeunick, et al., at least by including a threshold adjustor." The examiner maintains that the current claims are broader and thus met by the claims of Jeunink (US 6,788,88). As an example, a comparison to claim 1 is given below:

Jeunink (US 6,788,383)

(Claim 1): A lithographic projection apparatus comprising: an illuminator configured to provide a projection beam of radiation; a support configured to hold a patterning device, the patterning device configured to pattern the projection beam according to a desired pattern; a substrate table configured to hold a substrate; a projection system configured to project the patterned beam onto a target portion of the substrate; an alignment system; a predictive control system configured to generate a control signal to effect a compensation for a time-varying property of a part of said apparatus; and a comparator configured to compare said control signal to a threshold and generate a trigger signal when

said control signal is greater than said threshold, wherein said alignment system is configured to perform an alignment process in response to said trigger signal.

Pending Claim 1 (10/712,264)

(Claim 1): A lithographic projection apparatus comprising: a projection system configured to project a patterned beam of radiation onto a target portion of a substrate; an alignment system; a control system configured to generate a change in time-varying property of a part of said apparatus; a comparator configured to compare a value, based on the predicted change, to a threshold and to generate a trigger signal when the value is greater than the threshold; and a threshold adjustor that is configured to adjust the threshold, wherein said alignment system is configured to perform an alignment task in response to the trigger signal.

A comparison of the two claims shows the following differences:

- a) The limitations: “an illuminator configured to provide a projection beam of radiation; a support configured to hold a patterning device, the patterning device configured to pattern the projection beam according to a desired pattern; a substrate table configured to hold a substrate;” is not in pending claim 1.
- b) The limitation “a predictive control system” has been changed to “a control system” in pending claim 1.

- c) The limitation wherein the control system generates "a control signal to effect a compensation for a time-varying property of a part of said apparatus" has been changed to generate "a change in time-varying property of a part of said apparatus" in pending claim 1.
- d) The limitation of a "control signal" has been changed to "a value, based on the predicted change" in pending claim 1.
- e) Pending claim 1 has the added limitation of "a threshold adjustor that is configured to adjust the threshold," as noted by applicant in the remarks section of Amendment.

The above difference indicate that the currently pending claim is broader and thus fully met by claim 1 of US 6,788,383 (Jeunink), with the exception of the added limitation of "a threshold adjustor that is configured to adjust the threshold." However, claim 3 of Jeunink (US 6,788,383) states: "a threshold determining unit configured to increase said threshold each time an alignment process is performed," and claim 7 of Jeunink (US 6,788,383) states: "an input device configured to receive a user input of a value to be said threshold." Both of the limitations of claim 3 and 7 correspond to the added limitation of "a threshold adjustor that is configured to adjust the threshold." Thus, pending claim 1 is broader and fully met by either claim 3 or 7 of Jeunink (US 6,788,383). The reminding claims of the pending application are likewise met by Jeunink (US 6,788,383).

Thus, the examiner has considered the applicant's arguments in light of the amended claims and maintains the rejection.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-40 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,788,388 (Jeunink, et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other. Claims 1-40 are broader and thus fully met by claims 1-18 of Jeunink (US 6,788,388).

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rodney E Fuller  
Primary Examiner  
Art Unit 2851

A handwritten signature in black ink, appearing to read 'R. E. Fuller', is written over the printed name of the examiner.

November 14, 2005